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Original Department.

Communications.

THE CORRUPTION OF MEDICAL COLLEGES.

By Stephen Rogers, M. D.,

Of New York City.

President of the *New York Medico-Legal Society*, etc.

Having heard from various sources that many of the medical profession are laboring under the delusion that certain charges I have made, in a general way, relative to the graduation of persons of criminal practices by medical colleges, are not sustained as respects the *University of New York, Medical Department*, I regard it a duty to the profession, to the public, and to myself, to send you for publication a few observations upon the history of these charges.

To say nothing about any other reasons for sending these observations to the Medical and Surgical Reporter, I may state that you are supposed to be perfectly free from any New York College or local New York influence.

Concisely then: I have charged that the *New York University Medical Department* has degraded the profession, by graduating persons who, at the time of graduation, or before that time, were, or had been, criminal advertisers, and that the Faculty knew at the time of graduation that at least one such graduate had such a history, and that the only means the Faculty had, in any of those cases, of knowing that the graduate was not, at the time of graduation, in the daily practice of crime, was the statement of the criminal himself. *These charges have been both proved and confessed.* (See New York *Medical Record*, March 15, 1872, p. 70; June 15, 1872, p. 247.)

I also charged that in one case said College graduated a perjurer. This charge has not been investigated.

I again charged the College with the practice of selling diplomas to persons of whose qualifications to practice the Faculty had no kind of knowledge, or means of knowing. (*Medical Record*, April 15, 1872, p. 117.)

That said college admits such practice is manifest by the following copy of a paragraph taken from a letter of the secretary of the Faculty to Dr. J. W. McC.:—

"Sir:—You can, by forwarding your diploma, or *other proper evidence of graduation*, and paying for one full course and graduation fee, $175, get the *ad eundum* degree.

"I have sent you a circular, and shall be glad to hear from you again.

"Very truly,

"Secretary."

Let the profession decide if the charges be true.

Thinking the matter of sufficiently serious import to require that measure, and one which would properly come within the professed scope of the objects of the New York Academy of Medicine, I recently preferred a formal charge against one of that Faculty,—who is also a Fellow of the Academy—to the Academy.

As I am simply seeking to defend a principle, and not to expose individuals, I shall omit names in this relation of facts.

The following is the chief substance of the charge preferred in the Academy:—

"I charge —— —— with having violated that part of the Code of Ethics of the A. M. Association which relates to the maintenance of the honor and dignity of the profession: In that he has recently signed a diploma issued from the Medical Department of the New York University to one —— ——, whom he knew to have been a criminal advertiser, and a person of generally disreputable character.

"Also, within a very few years, of signing a diploma issued from the same College to one —— ——, who, for a long time before, and at the time of receiving said diploma, was, according to the city directory, *a physician, resident in the city, in the street, and at the number, and had the same name and initials*, of a daily criminal advertiser, and was, beyond a question, the criminal advertiser himself.

"I still further charge him with equivocation and misrepresentation in the former case, in the interest of a confessed charlatan and malefactor, and in so far as he could, by such means, has conferred respectability upon, and has encouraged and abetted crime."

These are the most material points in the charge which I made against this member of the Faculty of the University, and upon which the Ethical Committee of the Academy reported substantially as follows:—

"Guilt would, under those circumstances, attach to the signer of a diploma only in case he alone knew of the character of the person. If all the Faculty knew of it and signed it, he would be exculpated, or at least, his act would be guiltless."

Query: Is this medical profession logic?

The committee here fall into a totally groundless error by stating that I admitted that the whole Faculty of the College were quite as well informed in the matter of the character and history of this disreputable aspirant to their honors as was the member against whom I made the charges. I never admitted anything of the kind, for I did not know anything of the kind.

It was for that very reason I could not and did not bring charges against every member of that Faculty who at the same time is a Fellow of the Academy. I only knew that the member of the Faculty whom I charged was acquainted with the facts, for the reason that I had informed him.

He had, indeed, stated to me that the information had been communicated to another member of the Faculty, but up to the time of the ventilation of the affair in the *Medical Journal* this was the only means of knowing that any other member of the Faculty than himself knew anything about the character of the pupil at the time of graduation. And even the *Journal* statements gave me, as I thought, and still think, too little reason for accepting that statement as sufficiently reliable for the basis of a charge. I shall probably never regard any statement of that member of the Faculty as *knowledge*.

The committee, however, have accepted his statements and the *Medical Journal* publications as *knowledge*, and very soundly concluded that all the Faculty who knowingly signed the diploma of a person of such repute are equally responsible before the public, though queerly enough, as we have seen, they do not think that any single one of the Faculty has any individual responsibility in the matter.

Upon that principle, a member of a society of thieves could only be found guilty and punished in company with the whole gang.

While, therefore, the committee "are," as they say, "very decidedly of the opinion that acts of a medical college by which improper persons become entitled to share in the rights and honors of the medical profession are legitimate objects for the consideration and action of the Academy of Medicine, and that for such acts the Professors of Medical Colleges who are Fellows of the Academy become amenable to the Academy," they decline to advise the Academy to undertake action in the case of my charge against a single member of the Faculty, alleging as a reason for their action, besides the extraordinary sophistry above given, "a scrupulous observance of the rules laid down in the 14th (meaning no doubt the 12th) by-law of the Academy."

That the profession may know all there is in said by-law touching the matter, I here quote the section entire:—

"§ 3. It shall be deemed a chargeable offence to countenance, encourage, or patronize, by advertising, giving certificates, or in any other way whatever, an irregular practitioner, or the proprietor or vendor of any nostrum, patent or quack medicine; *or to commit any act which unfavorably affects the character of the medical profession.*"

I leave the profession to decide if the daily association, as one physician associates with another, with persons notorious as being or

having been criminal advertisers, and signing their diplomas knowing this fact, thus elevating them to the same level with students and physicians whose histories have been those of unblemished honor and virtue, are not acts which unfavorably affect the character of the medical profession.

Finally, this translucent report winds up this part of the matter, in substance, as follows:—

"The action of the Academy on these charges against a single member of the Faculty would lead to one of two results: either to make this a test case, with the prospect of having possibly as many separate charges brought forward as there were participants in the questionable acts, or the Academy would make itself the instrument for singling out one of its Fellows as responsible for an act participated in by several Fellows and to equal extent.

"In either case, the principle of impartial justice which should guide the Academy in all its dealings would not be upheld."

The tender-hearted committee thereupon collapsed; and thus stands the renowned New York Academy of Medicine in this medico-criminal controversy. The profession will form its own judgment as to the relations, thus far shown, between the Academy and the broad subject of professional morals and standing involved in this issue. By way of interlude in this history of facts, it is both proper and important, as it shows the malignant animus with which this College has pursued its shameful practices, that the profession be informed that the moment I became convinced that the presiding officer of the New York Pathological Society had, with full knowledge of the history of one of these advertising criminals, signed his diploma, I resigned my membership in that Society, for the reason that I was unwilling to sit in an assemblage presided over by a person whom I regarded as an abettor of crime. Incensed at this expression of determination to spurn his society, and that of his co-abettors, some of his friends and accomplices in the doings of the University, finally, after sundry infamies which I will not here mention, voted to expel me, instead of accepting my resignation. "A rose by any other name smells as sweetly." Though the proceedings on the part of this disreputable clique of the Society were illegal, and practiced on frivolous pretences, I am thankful to be out of such company, whether it be called resigned or expelled. I am guiltless. Anything but crime. I never have and never will, knowingly, compound with crime. If a thief steals my watch, he can never pay me not to appear against him. If a man has practiced crime, he can never buy me to treat him as an honorable equal, and any member of a Faculty of a medical college who will do so, is, in my opinion, an abettor of crime. Such I regard the members of the Faculty of the University who attempted to defend their act of signing the diploma in question.

I would no more associate with them on terms of professional respect than I would with the holder of that diploma. Medical colleges are not chartered as reformatories, and have no business with repentance for sins committed, and I hope and believe that the profession will treat all such colleges as assume that function with the contempt they merit.

THE LATE CHAUNCEY F. PERKINS, M. D.,

Of Erie, Penna.

It has been so recently that we presented to our readers in the MEDICAL AND SURGICAL REPORTER several interesting communications from this venerable and eminent man, that the intelligence of his death will appear to many as a peculiarly sudden stroke. It occurred on the 24th of September, after a brief illness, at the ripe age of ninety years.

Dr. Perkins was the son of Eliphaz Perkins, M. D., a graduate of Yale College, and a physician of some note, who practiced medicine for many years at Athens, Ohio, to which place he removed from New England in 1793. The elder doctor was an ardent advocate of the cause of education, and interested himself actively in favor of the institution of the Ohio University, and is named in the charter of that College as one of its trustees. Chauncey F., the subject of our memoir, commenced the study and practice of medicine under the tuition and care of his father. He completed his studies at the Universities of Pennsylvania and New York, from which latter he received his degree of Doctor of Medicine. He removed to Erie in 1828, and has since then remained in that city and vicinity, engaged until lately in the practice of medicine and surgery.

Dr. Perkins was a man of medium size,

with an organization capable of enduring a good deal of exertion and fatigue. He enjoyed excellent health during his long life. His sight was scarcely impaired within a year of his death, and he was gathered to his fathers at a ripe old age, with faculties in a rare state of preservation. The mental characteristics of Dr. Perkins were a well filled and accurate mind, aided by a retentive memory, with a strongly reflective and philosophic tendency, leading to classification and generalization of ideas. His observing powers were strong and minute. Nothing within the range of his mental or physical vision escaped him, and each fact and idea took its place in the mental structures his active organization was constantly erecting for his own use, or the use of his fellow men.

There were three lines of thought that his mind was fond of pursuing, and which to him were a real luxury. Especially, first, was the profession in which he had been born and educated, in which he lived, and to which he clung until a wise Providence removed him to a larger and higher sphere of operation. Ever thoughtful and watchful, never destructive, he observed with intense interest climatic changes, epidemic developments, the effects of civilized habits on the general constitution of mankind, and the progress of medical chemistry and its new remedies. With the silent joy only known to the cautious yet ardent reformer and friend of his race, he added each newly discovered fact, each tried experiment, to the great mass of generalized truth which has been heaped up by centuries of labor, and thus made himself a part of that indispensable body of men who sift and reform without destroying. In his enthusiastic youth, his busy manhood, or in his decadence, when time was laying the cold hand of dissolution on the frame that for ninety years had served him, Dr. Perkins never swerved in his firm belief in the general correctness of that well-established system of medical aphorisms which had its origin before the Christian era, and has been handed down corrected and improved to our time. No wild revolutionary theories could, with him, nullify the truths established and revised during the progress of centuries, but he could and did assist to add to and modify such truths by personal attendance on medical associations, and by well-digested papers presented for their use.

Here one peculiarity of Dr. Perkins must not be omitted. It is a severe trial of character for an older physician, in a medical consultation, to permit younger consulters to urge their extreme and heroic ideas and treatment, and to force them, with the honest belief of conviction, on the consultation. In such case, for the elder to watch, to caution, to gently restrain—to select the wise and weed out the noxious ideas, and utilize the full information and fresh brain of the graduate, is high wisdom. To lead, while suggesting little, is a forbearance and virtue few possess. In this regard Dr. Perkins was especially valuable. No patient died from an over-dose of narcotic when he was a consulter. The judgment day alone may reveal the numbers he may have saved or benefited by a caution, a hint, or a suggestion. In estimating character, we must not omit what men refrain from doing. Impulse, enthusiasm, love of notoriety, urge forward. Prudence, justice, love of order, restrain. Here it will be hard to do justice to the memory of Dr. Perkins. In a religious excitement it is no ordinary virtue to stand by, an example of moderation and earnestness, of prudence and zeal, of restraining patience and ardent hopefulness; to allow the fresh feelings of youthful converts and the excited emotions of other members apparently to pass by and outstrip him; to watch with deep joy the rising and spreading flood of piety, and yet to feel the necessity of moderating the flood tide, and to remain quiet, and gentle, and firm, and only to regulate by example or passing hint, when much is done of which judgment disapproves, but accepting the slighter evil for the greater good; to "stand and wait" in the service of God when feeling and sympathy would urge forward with the crowd—this is piety and strength of no ordinary kind.

Dr. Perkins was brought up a Calvinist, and remained such; but the natural tendency of his mind led him to reflect much on theology. Before the close of his life he thought that many of the harsher features of the system in which he had been educated might be softened to accord with the weakness of humanity. The belief that the Deity was a Father who wished to correct and reform, rather than a despotic judge who desired to punish, was more in accordance with his own benevolence of temper, and he deemed it just to presume that no more suffering was inflicted than might be necessary

for the maintenance of the Divine government; and he indulged the hope that the strict legal interpretations of the great Reformer of Geneva might be received with some allowance for severity.

Another noticeable feature of our deceased friend was a habit of thinking over the reforms that might be introduced into municipalities, for an increase of the comfort and wealth of the inhabitants.

His death was eminently peaceful and happy, and in every respect perfectly befitting his character, both as a man and a Christian. In connection with these brief remarks, we publish immediately below the proceedings of the Erie County Medical Society upon the announcement of the decease.

At a regular meeting of the Erie County Medical Society, Dr. Loop, of North East, being President, Dr. Stewart announced the death of Dr. C. F. Perkins, with a eulogium on his life and character.

Dr. Wallace offered the following resolutions, which were unanimously adopted:—

Resolved, That in the death of Dr. Chauncey F. Perkins, Christianity has lost an exponent, Science has lost a devotee, the Medical Profession an ornament, and each of his co-practitioners a most valued friend.

Resolved, That the long-continued and healthful life of Dr. Perkins was a living lecture on the value of strict temperance, well-regulated habits, and restrained passions.

Resolved, That Dr. Stewart, Dr. Bennett, and Dr. Brandes be a committee to express to the family and relatives of the deceased our sympathies with their bereavement.

Resolved, That the President appoint a member of the Society to prepare an extended obituary of Dr. Perkins, and that the city papers be requested to publish it with these resolutions.

ERGOT IN HEADACHE.

By D. R. Silver, M. D.,

Of Sidney, Ohio.

Through the medium of the Reporter I wish to call attention to ergot as a remedy in headache.

I am not aware that it has been reported of use in that very prevalent affection and symptom of disease. Its physiological action is established. It produces contraction of the muscular coat of the arteries; "Is a special stimulant of unstriped, involuntary muscular fibre, wherever found," (Brown-Sequard). The causes of headache are many and various, known and unknown. Whether known or not, we frequently wish to give relief to a suffering patient, before the cause can be removed.

It is safe to assert that in a majority of cases of "sick headache," and of headache unaccompanied by sickness of stomach, we have hyperæmia of the brain. And it is just in these cases that ergot is most effectual. Yet I have seen good effects when there was no evidence of congestive hyperæmia, a state rather of anæmia. This apparent paradox is explicable only by supposing that the *arterial tonicity* produced favors the return of blood. Paradoxes are numerous in medical practice. "Venesection sometimes relieves the effects of anæmia of the brain." (Niemeyer.)

You can never certainly predict whether ergot will or will not do good in a certain case. I would have you try it, brethren, in every case, and you will often be surprised with the result.

A record of many cases assures me that it is better than any other single article of the Materia Medica, in this disease or symptom of disease. I recommend it to patients who are subject to the malady, thus:

℞. Squibb's fld. ext. ergotæ, gtts. x-xx.

For one dose. To be repeated every half hour until relief is obtained, or four or five doses are taken.

The primary effect of opium is to produce hyperæmia of the brain. To neutralize this action I employ with it fld. ext. ergot. The combination has a happy effect in cases in which opium alone would be contraindicated by the fluxion to the brain.

Let it be understood that I do not regard ergot as a specific for headache. But thousands of people are made miserable once a fortnight or once a month (especially women), who by the use of the above prescription may be made, for the time, comfortable. My experience with ergot in the headache of fevers is limited. But I would expect no good result from it, since the pain is then, probably, produced by the abnormal temperature and *quality* of the blood, instead of being occasioned by fullness of the cranial vessels, as once supposed.

Medical Societies.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

[Reported by J. W. P. Bates, M. D.]

Incontinence of Urine.

Dr Morris. My remarks will be confined almost exclusively to my own experience in the treatment of this disease. The text books afford us but little information in regard to its management, and we are compelled to rely on our own experience. I shall confine myself to nocturnal incontinence, and incontinence in children. During the last few years a number of articles have appeared in the medical journals in regard to the proper treatment, but nearly all of the remedies proposed seem to be at random, and the success in the use of them has been so slight, that incontinence has almost become an opprobrium of practical medicine.

In the old, incontinence is an evidence of some severe lesion, but it is not so in the young, and exists free from brain or spinal trouble. The causes which produce it in children are worms (that great bugbear of the maternal mind), acidity of the urine, irritation in the rectum, atony of the bladder and over-distention, general or local debility, nervous temperament, etc. We must ascertain the history of the child, and the family history, if we wish to contend with it successfully; the urine must be tested for acidity, the bladder and rectum examined, and every means used to discover, if possible, the cause of the trouble. If it depend upon acidity, an alkali and benzoic acid are all that are necessary; if from worms, an anthelmintic may afford relief; if defective nutrition be present, proper means must be taken for the improvement of the general health. The nervous is the most common form, and also the most amenable to treatment: most frequently met with in girls. In these cases I use syr. ferri iodidi, and it acts like a specific if combined with moral means. If there be nocturnal incontinence, I give atropia at bedtime. These are the only remedies that I can rely on. Strychnia is valueless in these cases, although it might prove efficacious in combination with syr. ferri iod. Bromide of potassium is almost useless, and tinct. cantharides entirely so. In the purely nervous form the urine is limpid, as in hysterical cases. The diet is important. I have no confidence in mechanical means. Have tried Sir Dominic Carrigan's collodion remedy, but it failed in my hands. May have been some defect in the collodion used. This is the only mechanical means that has any philosophy in it.

If incontinence can be produced by phimosis (which I am disposed to doubt), circumcision is the remedy. Trousseau's truss, injections of warm water, circular pad, reed to compel the person to lie on his side, and all mechanical means that I know of, are injudicious and useless.

I have but little to suggest in regard to the employment of moral means. It is only in cases of a purely nervous character that the old mode of treatment, viz., by scolding, shaming, etc., has any effect. The voluntary power from the cerebro-spinal system should be called into play, if possible. Hydrate of chloral is said to act very kindly, but I have not used it. I think it might be useful in those cases dependent upon spasm of the bladder. I have no confidence in any treatment not constitutional, as I consider incontinence an evidence of weakness, and we should endeavor to build up the system. The age at which children are most frequently affected is from two to ten years. I give gtts. x of the syr. ferri iod. three times a day. When it is nocturnal incontinence, I give atropia at bedtime. I am often called upon to treat vesical trouble as a result of uterine disease, and find atropia very useful in giving relief.

Dr. Evans. I have had some experience in the use of chloral. Some weeks since I prescribed grs. x, at bedtime, to a girl ten years old, who had suffered from nocturnal incontinence for some time. She has not been troubled since. I have frequently tried syr. ferri iod., but do not know that I ever derived any benefit from it.

Dr. Erich. I have not met with this disease so frequently in nervous cases as in strong, hardy boys, and mostly in winter. I directed woolen clothing, and gave full doses of quinia three times a day to produce wakefulness; made them go to bed early, and directed the parents to rouse them and make them evacuate the bladder about eleven or twelve o'clock. I have used the catheter to produce soreness of the urethra, so that as soon as the urine touches the part the pain will waken them.

Dr. Liebman. Prof. Burns, of Tübingen, relied very much on the use of the catheter. It was introduced every morning, and its use was persisted in for some time. Belladonna was used at bedtime. This practice was quite successful.

Dr. Walshe. I have had better results from the bromide of iron than from the iodide. In cases like those referred to by Dr. Erich, I give turpentine in ten drop doses until strangury is produced. It proves quite effectual.

Dr. Arnold. I have found this a very intractable disease in children. The vast majority of them are not cured. It is difficult to account for the fact that perfectly healthy children should be troubled with this ailment. I have often thought that the sphincter of the bladder, or the nerves that preside over it, did not go to sleep as soundly as the rest of the body. Owing to some constitutional peculiarity, it is not so soundly asleep, and the urine irritates the part and is expelled. Another thing I have remarked is, that nocturnal incontinence is often a symptom of nocturnal epilepsy. I could mention several cases in which it was the only evidence we had until the attention of the parents was called to the fact, and they were

instructed to watch the case. This has induced me to use large doses of the bromide of potassium. This controls, for a certain length of time, but does not effect a radical cure. I cannot say that I have cured a single case. I have used the iodide of iron, and belladonna, but have not met with the success claimed by Dr. Morris. In some cases it stops as they get older, in others it never does. In nervous cases, the recommendation to lie on the side and not on the back, has a good effect.

Dr. Erich. I have known several persons who have lost this bad habit on approaching puberty. They were all great sleepers, especially during the winter time.

Dr. Morris. I agree with the remarks made by nearly every gentleman who has spoken. I must, however, differ somewhat with Dr. Arnold, as I think in a majority of cases it is a curable disease. As it is a functional disorder, we should persist in our treatment, and endeavor to arrest it at any early stage. I think chloral might be of benefit in cases dependent upon spasm of the bladder, and cure the disease by breaking up the morbid irritability. I perfectly cured a boy, seven years old, by two weeks' use of syr. ferri iod. Another case, æt. sixteen, has had no return for two months. Rousing the patient at ten or eleven o'clock, and compelling urination, is bad practice. I think we ought to avoid this, as it keeps up the irritation and thus perpetuates the disease. These cases usually void the urine more frequently than healthy persons. There is not the same control over the sphincter. Belladonna acts on the urine and makes it less irritating. I think it is far preferable to conium, hyoscyamus, or even opium. Dr. Arnold is doubtless correct in regard to its being a symptom of nocturnal epilepsy. It is always a sign of mental or physical weakness. The strong in mind and body never are its victims.

Dr. Arnold. I do not wish to be understood as intimating that incontinence predisposes to epilepsy, but its presence should lead us to inquire whether epilepsy is not also present. I consider it one of the most intractable of functional diseases of children. I have been baffled time and again, and I cannot understand how the two weeks' use of syr. ferri iod. can cure it. Iron is a very slow agent, and we must suppose that it required but a slight amount of medicine to restore the balance lost on account of some debilitating circumstances. As these cases are weakly, iron is always indicated as a tonic, not as a specific.

NEW YORK PATHOLOGICAL SOCIETY.

The Annual Meeting of the New York Medico-legal Society, for the election of officers for the ensuing year, was held Thursday evening, October 10th, at the College of Physicians and Surgeons, corner of Fourth avenue and Twenty-third street. The following gentlemen were chosen:—For President, Clark Bell, Esq.; First Vice-President, John C. Peters, M.D.; Second Vice-President, A. J. Delany, Esq.; Recording Secretary, Dr. J. Ross; Assistant Recording Secretary, W. B. Wallace, M.D.; Corresponding Secretary, Dr. I. F. Chauveau; Chemist, Dr. A. Wohlfarth. This gentleman died in Germany, of heart disease, and the Society was not aware of the fact. The vacancy will be filled at the next meeting. Treasurer, Dr. T. S. Bahan; Librarian, William Shrady; Trustees: Dr. Stephen Rogers, Jacob F. Miller, Esq., O. C. Warfield, Dr. T. C. Finnell, and Dr. Richardson; Pathologist and Curator, Dr. P. E. Donlin.

Editorial Department.

Periscope.

Recent Studies of Puerperal Convulsions.

Several writers have devoted their attention recently to the treatment of puerperal convulsions. We shall extract from their essays sufficient to show their conclusions on this important topic.

Dr. John W. Richardson, of Tennessee, read before the Tennessee State Medical Society a general review of two hundred and ninety-seven cases. The following is a summary of the tabular statement:—

Number of cases, 297; number of primiparas, 219; number of multiples, 75; had fits before delivery, 135; had fits after delivery, 57; number bled, 193. Result: mothers recovered, 224; mothers died, 71; children alive, 61; children dead, 72.

It will be seen, on examination, that the table is imperfect. This is the result of imperfect reports. Some had no notes of their cases, and could not answer all the interrogatories correctly; hence when certain numbers are added together they do not make the required amount. Some of the reports say nothing about the children, and consequently the number of births cannot be calculated. Of the number reported, however (133), it will be seen that more were born dead than alive.

Plans of Treatment.

On blood letting, Dr. Richardson asks, Is it true that pregnant women have too much blood, and that this superabundance produces

hyperæmia of the brain, which causes convulsions? If so, the natural remedy, and the only one necessary, is to withdraw a sufficiency of blood to reduce the quantity to the normal amount. But we see convulsions in women whose condition teaches us, too plainly to be mistaken, that they have not too much blood. What causes them to have convulsions? It may be replied that, in the latter cases, the congestion is *passive*, while in the former it is *active*. Does congestion of the brain *produce* convulsions at all? Most certainly, in cases of unmistakable congestion of the brain, as we see it in other cases, stupor and coma, not convulsions, are the symptoms. It is true that there is coma in these cases of convulsions, but it is also true that it follows, and does not precede, the convulsions. May we not conclude, then, that the coma is produced by cerebral congestion, consequent upon the convulsion, whether it be in a plethoric or in an anæmic woman?

May not the symptoms attributed by some to general sanguineous plethora be produced by an unequal distribution of the blood, even when it is not superabundant? If hyperæmia of the brain is the cause of the convulsion, *this* must be true in the anæmic, because we know that they have a smaller amount, and of an inferior quality. In many women we see œdema in the feet and legs; in some it is very great, and is caused, doubtless, by mechanical means, pressure of the gravid uterus on the veins returning the blood from the inferior extremities.

We have seen some whose legs were so enormously swollen that the skin would split open, and the effused serum trickle down their legs in streamlets to the floor. These women look as if they did not have a drop of blood in their bodies. My observation induces me to believe that they all have a scanty secretion of urine, and very thin, poor blood. If mechanically, or by any other means, the return of the blood from the brain to the heart should be thus arrested or impeded, we should expect œdema of the brain; why not? Does not the asphyxia preceding the convulsion, and the failure of the heart to receive and distribute the returning blood, produce congestion of the brain?

As the convulsion approaches, the pulse becomes small and rapid. In the coma the pulse is fuller and slower; at any rate, this is my experience. The coma is deep and profound in proportion to the cerebral congestion, which is the consequence of the asphyxia, and the heart labors to remove it. If this labored action of the heart does not remove the congestion the coma continues, and the woman dies from congestion of the brain; precisely like other persons die from congestion or compression of the brain produced by other causes, and coming on under different circumstances. If it does remove it, consciousness, or partial consciousness, returns, the cycle is then complete; but the cause of the convulsion may not yet be removed, nor made inoperative; and we have a return of the convulsion.

I imagine that the cerebral congestion follows the asphyxia and convulsion, and, as a natural effect, in the anæmic as well as in the plethoric, being more defined, perhaps, in the latter. Venesection then suggests itself as a reasonable remedy, to assist the heart in removing the congestion from the brain. *This it may do*, but does it prevent a return of the convulsion? Certainly it does not, unless cerebral congestion be the cause of the convulsion. That this is the view taken by many is clearly deducible from the large and repeated bleedings practiced in this disease. If the cerebral congestion follows, and does not precede the convulsion, it would seem that other remedies might be more successful than venesection in preventing its return.

The premonitory symptoms of the attack do not usually portend *coma*, which always attends congestion and compression of the brain; but they generally foreshadow *convulsion*. I do not intend to say that coma *never* comes on unless preceded by convulsion, for we often see that it does; but not in puerperal attacks. It may now and then happen that a pregnant woman may become drowsy, dull, stupid, and finally comatose. And when this does happen she dies like a person from an apoplectic or paralytic stroke, or comes slowly out of the attack with partial paralysis. *She does not have repeated fits*, and finally wake up out of a long and quiet sleep, as though nothing unusual had befallen her. There is certainly something more protean, erratic, electric, in the composition of puerperal convulsions than can be explained by humoralism.

When we look at the reports in the table we see that there is much uniformity in respect to the treatment. Bleeding is used by some to remove hyperæmia of the brain, which they hold as the cause of the convulsions. Others bleed to protect the brain from the congestion which follows the convulsions, each one repeating the bleeding as long as the patient can bear the loss of blood, or until the convulsions cease; hence we see the large quantity usually abstracted, because bleeding scarcely ever arrests the convulsions.

It will be observed that cupping, cold to the head, blistering, cathartics, and antimonials, were the remedies usually employed in conjunction with venesection; and these failing to arrest the return of the convulsions, opium, in some form, was added; and latterly chloroform, chloral hydrate, bromide of potassium, and veratrum viride.

In the treatment of puerperal convulsions, always recollecting that if there was no uterogestation we would have no convulsions, we should keep constantly in view the importance of delivery as soon as it can be accomplished with safety to the mother. With those who believe that *hyperæmia* of the brain is *the cause* of the convulsion, and that its continuance produces a return of the convulsion, again and again, bleeding largely, antimonials, cold to the head, active cathartics, and derivatives,

will be their dependence and chief reliance. With them the cause is *centric*.

It remains yet to be seen how far the veratrum viride may be a substitute for bloodletting, and by what mode of action it is a substitute; or whether it is a substitute at all, in the sense in which it is used.

With those who believe that the cause is *eccentric*, originating in the condition of the uterus, its annexes, or adjacent organs, and that the nervous centres are in a state of hyperæsthesia, the treatment will, of course, be different. They believe that it is because of this hyperæsthesia (excessive irritability and sensibility) that the nervous centre responds to the demand which is made on it by those eccentric causes, in the form of convulsions; and that there are a few means only necessary or useful in the treatment. They do not believe that this nervous hyperæsthesia is produced by super-nutrition, or by hyperæmia of the brain, and consequently they are not the advocates of active depletion. They, too, fear the consequences of cerebral and spinal congestion, which inevitably follow the convulsion, and after relieving the former (or assisting what they can), they direct their attention principally to the prevention of the convulsion, which they expect to do by the use of such means as will put the cerebro-spinal system in such a condition that it will not recognize the demands of eccentric application, either by removing the cause, or by making it inoperative. They, too, claim veratrum viride, but chiefly chloroform and opium, and certain remedies known as nervous tranquilizers, to prevent a return of the convulsions; always, however, recognizing the fact that there is no security against the convulsion until the cause is removed.

DR. BRADLEY'S VIEWS.

In the "Proceedings of the Connecticut State Medical Society," Dr. W. Lockwood Bradley, of New Haven, Connecticut, writes on the same subject. He first discusses

THE PREVENTIVE TREATMENT.

The premonitory signs which precede an invasion of the disease are similar to those observed in Bright's disease of the kidney. They have been described by Dr. J. Hall Davis, of London ("Transactions of London Obstetrical Society," vol. xi, p. 270), in the following language: "Dropsical effusions, especially in the form of œdema of the face and upper extremities, associated with albuminuria and deficient urea in the urine, accompanied, in some instances, by the presence of cylindrical blood-clots, casts of the uriniferous tubes, with fatty epithelium." A knowledge of these signs is necessary to an early and successful adoption of *preventive* treatment; consequently, the urine of the pregnant woman should be examined chemically and microscopically, at least once in two weeks, during the last two months of pregnancy. This is especially important in primiparæ, in those in whom there is œdema of the face, or in whose urine albumen has been present or suspected in a previous labor, or at any other time.

Having detected the presence of these signs, or of well-known premonitory symptoms, we must vary our treatment according to the constitution of the individual. Moderate exercise should be enjoined, but all mental excitement should be avoided. If the patient is strong and plethoric we must seek to overcome any tendency to congestion of the nervous centres by giving an active saline cathartic, ordering an unstimulating diet, and, in rare cases, bleeding from the arm. If, on the contrary, the patient is anæmic and weak, a mild laxative and a nutritious diet should be ordered. In both sthenic and asthenic cases we are liable to have œdema and albuminuria. These conditions should be treated by cupping or counter-irritation over the renal region, and the production of free diaphoresis. In such cases, Prof. William H. Byford, of Chicago ("Treatise on Obstetrics," p. 444, 1870), considers the wine of colchicum an invaluable remedy, and advises its administration in as full doses as the patient can bear.

THE CURATIVE TREATMENT.

The *curative* treatment of puerperal convulsions should be introduced by the adoption of certain precautionary measures; injury to the tongue should be prevented by interposing between the teeth a piece of soft pine wood, cork, or other suitable substance; the clothing should be loosened, to prevent any obstacle to free circulation and respiration; the room should have a full supply of fresh air, and the movements of the patient should, as far as possible, be unrestrained. After these precautionary measures we should adopt such of the following methods of treatment as may seem best adapted to each case.

In order to remedy any possible irritation from the accumulation of excretions in the bowels, it is recommended that a powder of calomel and jalap should be administered; or, if the patient is unable to swallow, a drop or two of croton oil placed upon the tongue is preferable. To hasten the movement of the bowels an enema, rendered purgative by an ounce and a half or two ounces of castor oil, may be given. If necessary, which it very rarely is, the bladder should be emptied by means of a catheter. Through fear of exciting a convulsive paroxysm, all unnecessary irritation of the skin or mucous passages should be avoided. For this reason, and because of their comparative inefficiency, the application of sinapisms to the feet, and of cold to the head, are rarely employed.

Passing now to the consideration of methods of treatment which are more or less debatable, we find that nearly all obstetric authorities are agreed as to the value of bleeding when employed *locally*. M. Cazeaux would confine its employment to cases where the convulsions

have followed a profuse hemorrhage. Some value it because it acts as a counter-irritant, and also because the quantity of blood can be accurately measured.

Regarding the employment of *general* bleeding there is great diversity of opinion. If the patient is feeble, and the pulse weak and quick, we must place our reliance upon other remedies. Prof. T. Gaillard Thomas, of New York, at one of his recent lectures, related a case, seen by him in consultation, where an attempt was made to diminish the flow of blood to the head by passing a bandage around the leg; the patient had previously been bled as much as seemed advisable.

VALUE OF CHLOROFORM.

In the year 1848, Dr. Richet, of France, first employed chloroform with success in the treatment of puerperal convulsions; in the same year Simpson, of Edinburg, experimented with it, and at the present time its utility, at least in a large proportion of cases, is well established. It has been claimed that the necessity for bleeding will be diminished in proportion to the frequency of the administration of chloroform at an early period of the attack. On the other hand, the advocates for blood-letting, who employ chloroform as an adjuvant, argue that, in the majority of cases, the patient is not seen until several convulsions have occurred, and that frequently pulmonary congestion (indicated by lividity of face and quickened respiration) must be relieved by blood-letting before chloroform can be safely administered. The employment of chloroform will be successful for the amelioration or prevention of the convulsive paroxysms in proportion as its inhalation is commenced at an early stage of the disease. Dr. Carl Braun reports sixteen cases treated by chloroform, all of which recovered. This is a degree of success which is certainly unparalleled, and the repetition of which can scarcely be expected; for this reason, the recommendation made by him as to the manner of administering chloroform is especially worthy of remembrance. He says that if chloroform be not administered in time to cut short a paroxysm, as much atmospheric air as possible should be allowed to enter the lungs during the convulsive attack and the coma immediately succeeding. Under such circumstances the respiration and the circulation are very much impeded, and we can understand how the administration of an anæsthetic would be apt to increase the difficulty to a dangerous degree. As soon, however, as the respiration becomes easy, the inhalation of chloroform should be commenced, and carried to the production of complete narcosis; nothing short of this will completely arrest the convulsive manifestations. It is impossible to lay down any rule regarding the proper duration and intensity of the anæsthetic sleep. In severe cases, where the paroxysms tend to increase in force and frequency, it should be continued for three or four hours, then suspended for a time, only to be recommenced if convulsions are threatened. By a judicious interruption in its employment it can be continued for twenty-four hours, or longer. In certain cases bleeding is inadmissible or insufficient, and chloroform faithfully administered either does not prevent the recurrence of the convulsions, or its use is counter-indicated on principles which govern its general employment. Dr. Elliot (op. cit.) reports a case in which he was obliged to suspend its use because the breathing suddenly stopped, and the pulse ran down in a most alarming way. In such cases other remedies have been employed as adjuvants or substitutes.

CHLORAL.

During the past three years a few cases have been reported in the journals showing successful results from the employment of the hydrate of chloral. The bromide of potassium has been given, in doses of a half to four drachms, both before and after delivery, and, in mild cases, with good results. The late Dr. N. B. Ives, of New Haven, was accustomed, in his treatment of convulsions after delivery, to rely upon the administration by enema of one drachm of tincture of stramonium; and his practice has been indorsed by the experience of other practitioners in the same place. When the attack is somewhat subsiding, it has been recommended by the highest authorities to give an opiate. Dr. Collins, of Dublin, would restrict its employment to cases where the paroxysms continue after delivery. Believing that opium increases cerebral congestion, Tyler Smith and Cazeaux, in common with the majority of French accoucheurs, are opposed to its employment, except in cases of anæmia, or where a large amount of blood has been lost. When the administration of opium is indicated, it should be given in doses sufficient to produce a positive soporific effect.

Sometimes the comatose condition of the patient, or the rapid succession of paroxysms, prevents the administration by the mouth of opium or other remedies. These obstacles to medication are overcome by the hypodermic injection of a solution of morphia. Unlike opium, it does not produce cerebral congestion; and, as in the case of one full bleeding, we gain an additional advantage from the rapidity of its action.

DR. MONTGOMERY'S VIEWS.

Another summary of treatment is given by Dr. E. Montgomery, of St. Louis, in the St. Louis *Medical and Surgical Journal*. He says:—

On being called upon to treat a case of puerperal convulsions, of either the epileptiform or apoplectic variety, if the patient was robust I would employ venesection freely, even if the patient was in the midst of a paroxysm; I would apply ice to the head and upper part of the spine, and if the patient could swallow, and the stomach were in a condition to retain it, I would give a brisk purgative of calomel and

jalap or croton oil. After the bleeding and the administration of the purgative I would put the patient under the influence of chloral hydrate, giving fifteen or twenty grains every two or three hours, until I felt certain that the convulsions had ceased. If the cathartics and the chloral could not be retained on the stomach I would give them *per rectum*. In administering chloral hydrate I think it important, with a view to safety, to give it in a dilute solution, and never to repeat the doses at too short intervals. I generally order two drachms in four ounces of spearmint or cinnamon water; a tablespoonful of this solution in a tablespoonful of syrup for a dose.

I feel confident that nearly every case, if taken promptly at the commencement of the attack, will speedily yield to the above treatment. During the past three years I have attended, or visited in consultation, eight cases, six of which were believed to be of the epileptic form and two of the apoplectic variety, and they all recovered, although one of the patients had endured five violent convulsive paroxysms before the chloral was administered.

Besides the free purgation, attention should be directed to the urinary organs, to see that free uresis should be enjoyed; and as long as any heat of head, flush of countenance, or muscular jactitation exists, the ice bags should be applied to the upper portion of the spine and to the head, and the sick room kept well ventilated, dark, and quiet.

VALUE OF CHLORAL.

I greatly prefer the chloral hydrate to the chloroform or the ether and chloroform treatment. I think the chloral is much safer, and it can be administered safely and efficiently by any sensible and experienced nurse.

If we witness the treatment of a case as I have indicated, and then read over some of those described by Dr. Dewees and others, where no chloral was used, we will rejoice and feel grateful that we have a remedy that can calm the phrenzied brain, soothe the troubled nerves, and even disarm Death of his terrors.

In asthenic cases, or in the nervous or hysteric forms of the disease, venesection, strong purgatives, or other depleting and depressing remedies will not be required. A few good enemas of turpentine and assafœtida, and keeping the patient under the control of the chloral hydrate, will be the chief medication required. Of course, good nursing, proper dietetic and hygienic measures, and perhaps some nervine tonics, will be necessary.

In cases occurring during labor it has been very common practice to expedite delivery by every means available, in many instances using severe and forcible measures to accomplish that object. In my humble opinion this practice is highly reprehensible; for if the uterus is not freely dilated, and the child well down in the pelvis, it will be immensely safer for the patient to keep her under the influence of the chloral until the forceps can be easily and without risk applied, instead of forcibly dilating the uterus, and turning the child, or dragging it away by the aid of instruments. In my experience, if the convulsions occur during the process of parturition, a large venesection, free purgation, and the influence of the chloral, will most happily expedite delivery, or at least promote that desirable condition which will enable us to assist nature in her efforts to empty the irritable organ. Of course, if at the full period of gestation, as soon as it can be done with perfect safety to both mother and child, we would not hesitate to use the forceps; but would refrain from having recourse to version unless there was no other resort promising equal advantage. In the chloral hydrate we have a remedy by which we can keep the patient easy and comfortable, and we therefore need be in no hurry to use violent or extreme measures.

In a recent case of severe eclampsia gravidarum, although the patient had suffered from the fifth convulsive paroxysm before the chloral hydrate was administered, it effectually soothed and relieved her, prevented any return of the spasms, and greatly contributed to the speedy and fortunate issue of the case.

So happy were the effects of the remedy in this instance that the lady insisted on taking a dose every night for a week after she had passed the paroxysm, saying that it caused her to pass the night so comfortably, and inspired her with such confidence in a hasty recovery. This was a very severe case of the apoplectic form of eclampsia, occurring in a very robust lady, aged thirty-six, in her eighth month of utero-gestation, of her sixth pregnancy. The convulsions were frightfully severe, about two hours apart, with stupor and great mental aberration between the paroxysms, the pulse unnaturally slow and hard, the pupils contracted, the whole surface almost black during the spasms, and remaining livid between them, and on the whole a very unpromising case; and yet the chloral hydrate, although not given until after the fifth convulsion, promptly arrested the spasms, and we believe saved the patient from a sudden death.

The Permanence of Syphilis.

Dr. Fournier, as quoted in the *New York Medical Journal*, says:—How shall we reply to a patient who, at his last visit, puts the following question to you, which you may be sure he will do: "Now, doctor, am I finally rid of this disease? Do you think that I am radically cured?"

To this you must reply as you think, and as science warrants you to think and to hope. Now, what you really think is that your patient has every chance of being free from syphilis now and forever. You are, in a moral point of view, warranted in saying this.

But you also think that, in spite of your long and active course of treatment, this patient might be exposed at some future day to new

and later manifestations. For, unfortunately, there is no sign which permits us to *affirm a cure in syphilis*, for it is, as M. Ricord says, "neither the dose, nor the pharmaceutic preparation, nor the duration of the treatment, which confers an absolute immunity, or which can guarantee the radical extinction of syphilis." It is necessary to say this to your patients.

We may promise health or a cure to a person dying either of phthisis or cancer, perhaps, for that is a pious lie, and is a consolation which, in our helplessness, we owe to our unhappy patient, and which it would be cruel to refuse; but to a subject in full health, who enjoys all his faculties, and who, moreover, we are almost warranted in believing to be forever rid of his disease, we owe the truth, and that only, and it is for his benefit that he should know the truth.

Should a syphilitic manifestation develop upon such a patient, say ten, fifteen, thirty, or forty years after contagion, it is possible that it would not call to his mind the remembrance of a disease a long time vanished and almost forgotten, and that the physician, not being aware of his syphilitic history, might not recognize the syphilitic character of the lesions, more especially as these later lesions are far from presenting a typical syphilitic appearance. This may be a lesion of a viscus, a tumor in the brain, a sclerosis of the cord, an amaurosis, or it may be a hemiplegia or a paraplegia. Now, in the eyes of a layman, what connection could be associated between this manifestation and an old sin of youth past, and gone, and expiated years ago? What is the necessity of making a full confession to the physician, and of reviving such compromising reminiscences? The result would be that the patient would say nothing of his previous syphilitic history, and the physician not being informed, would run the risk of mistaking the nature of the trouble. In this case, the lesion not being understood, it is not treated with the only remedy which is beneficial for it, therefore it persists and follows its normal evolution, and may result in a grave or fatal termination, when otherwise it might have had every chance of being cured if it had been traced to its true origin and treated by its specific. You may be certain of the fact that a number of persons having tertiary syphilis have become afflicted with incurable infirmities, or even have died simply from the fact that a late syphilitic lesion has not been recognized and treated as it should have been. Now, it is necessary to warn your patients against this possible contingency. The possibility of tertiary lesions manifesting themselves in the future makes it of importance that our patients should be fully and clearly made aware of their true state when we dismiss them as cured.

Never forget this when one of your patients, at his last visit, shall put this serious question to you: "Am I cured?" Do not neglect to tell him what you think, and, as an adieu, give him this salutary but very essential advice:

"Yes, I think you are cured. I think science will warrant me in saying that. But whatever may happen to you in the future, whatever disturbances you may have to your health, *remember your old disease.* Tell your physician of it. Do not at any hazard fail to acquaint him of your syphilis. Tell him plainly, ten times rather than once, that you have had syphilis in earlier days. It is probable that this information may be of no service to him; but it may happen that it is very important for him and for you especially, for upon it your cure and perhaps your life may depend."

Poisonous Bite of a Species of Domestic Spider.

Dr. G. C. Paoli writes to the *Chicago Medical Journal*:—

I was called the eighth of July, in the afternoon, to see a boy four years of age, who previous to my arrival had been playing in the yard. On examination I found in the middle of the right leg a small elevation on the skin, which is called a papula. Neither swelling nor heat were perceptible, but the skin around the papula was very sensitive to the touch. Every attempt to stand on the leg produced the most excruciating pains. After careful examination, I concluded that my patient had been stung by some kind of an insect, but none of his playmates of the same age could give me any information that might corroborate my conjectures. I prescribed for the night a weak solution of permanganate of potassa, as an external application. Two hours after I had arrived at my residence I was recalled, and informed that the patient was suffering from an inguinal hernia. To satisfy the parents I called again later in the evening, and found there was no rupture as they feared, but that one of the inguinal glands was somewhat swollen, as an effect of the irritation produced by the poisoned wound. We often find that small wounds or ulcerations in the lower extremities occasionally produce the above effects. The next morning on visiting my patient I found the following symptoms: The whole limb was swollen, and the temperature of the skin increased; pulse 130. He had been vomiting; tongue slightly coated; bowels constipated; urine scanty; very restless and sleepless. The whole limb was very sensitive to the touch. I ordered an emollient poultice, and, internally, carbonate of ammonia. In the evening I gave him an injection to move his bowels, and codeia to produce sleep.

The third day, the pulse the same; the tongue dry and coated; had dozed a few hours; bowels moved. The fourth day, erysipelas appeared on the whole limb, involving the subcutaneous tissue. After the application of iodine the erysipelas was dispersed about the twelfth day, but on the fourteenth day a similar swelling and erysipelas also appeared, involving the whole left limb. During his illness

he was several days delirious, and rejected all kinds of food except cold milk.

Remarks on the case.—About the eighth day after he was taken sick, I was informed that a gentleman living in the house saw a spider of brownish color with a yellow tint crawling on my patient's leg; he instantly killed it. According to the description, I supposed it was a species of spider which is by no means rare about Chicago. There have been the most exaggerated descriptions of the nervous symptoms caused by the bite of the Italian tarantula. We find the symptoms of chorea precisely similar, but in this case the nervous symptoms were entirely absent. I must add that the poison was a long time lingering in the system, and it took my little patient six weeks before he could walk and regain his strength.

Cold Water Treatment of Typhus.

A report furnished by Dr. Scholz, the director of an establishment at Bremen, states that since the year 1868 125 cases of abdominal typhus have been hydropathically treated in the Bremen Infirmary, of which 82 were men, and the remainder females. The mortality was scarcely four per cent. The plan adopted was immersion in water at a temperature of from 10 to 20 deg. Cent. (50 to 60 deg. Fahr.) The temperature was taken every three hours, or in bad cases every two hours: in the axilla a temperature of 39 deg. C. (102 deg. F.) was considered as an indication for a bath. When immersed the patient either moved himself or was lightly rubbed. The duration of the bath was from ten to fifteen minutes, or in many cases, not more than five or six minutes. He was placed in bed without being dried, and was covered with a woolen coverlet. When the brain was much affected, cold douches were directed against the head whilst the patient was in the bath, and ice-caps were occasionally used. Cloths dipped in cold water were placed at intervals of a quarter or half an hour upon the chest and belly. These appeared to exert a favorable influence upon the diarrhœa, and were felt to be agreeable to the patient. Scarcely any drugs were administered. The diet was light but nutritive. Scholz regards the withdrawal of heat as the main object of the cold baths: he does not attribute much value to them as agents for producing a better distribution of the blood, or as acting upon the nervous system, or improving the function of the skin. Hence, in very severe cases, where there is no material augmentation of the animal heat, he does not think it right to use them, but brings the skin into action by powerful thermic and mechanical irritation (frictions.) The general results of the reduction of the mean daily temperature in typhus, caused by the baths, are that the course of the disease is milder, the type of the disease more simple, and the cure more certain and expeditious. In four per cent of the cases, intestinal hemorrhage occurred, for which full doses of the perchloride of iron were administered. Among the secondary diseases that were observed were peritonitis from perforation, two cases of articular rheumatism, and some cases of erysipelas and abscess. In two fatal cases, ulcers of the larynx were observed. In convalescence from severe cases, temporary hyperæsthesia of the toes was observed. Relapses occurred in four per cent. of the cases. Scholz distinguishes two periods in the treatment of the disease. In the first or early period the patient must not be bathed at night, and not more than five times during the day: whilst in the second or later period the number of baths may be sufficient to keep down the temperature of the body to near its normal degree. The same plan of treatment was tried and found very advantageous in scarlet fever, measles, diphtheria and erysipelas.

Diagnosis of Iritis

In an article read at the meeting of the Illinois State Medical Society, held at Rockford, May, 1872, by E. L. Holmes, M. D., of Chicago, and published in the *Chicago Medical Journal*, he says:—It seems to me our best works scarcely dwell with sufficient emphasis on the difficulties which may embarrass the student in the diagnosis of this disease.

A typical case of iritis, even in its early stages, offers little difficulty. The symptoms upon which a diagnosis is based are irregularity, contraction, and immobility of the pupil, discoloration of the iris, with loss of the brilliancy of its surface, turbid condition of the aqueous humor, pink zone around the cornea, photophobia in and about the eye, pain, and diminution of sight from turbidity of the aqueous humor, or exudation upon the crystalline lens.

Not unfrequently these symptoms are masked. From the very onset there may be not only considerable œdema of the conjunctiva of the globe, but also of the whole lid, with no marked change in the appearance of the iris or pupil. Such an attack could be easily mistaken for simple conjunctivitis. The terrible pain, so often experienced in iritis, is sometimes absent. The pupil is not always, at the commencement, irregular. In some forms of the disease the inflammation is confined almost entirely to the posterior layers of the iris, producing no exudation upon the pupillary edge, and scarcely any redness or irregularity.

Many of the symptoms of iritis are present in some forms of keratitis. We have redness, photophobia, contracted and immovable pupil, dimness of vision, and apparent turbidity of the aqueous humor, with apparent want of brilliancy of the surface of the iris from a cloudy condition of the cornea.

I allude to this subject, from the fact that vision of very many eyes is partially, or even totally, lost, because an improper diagnosis is made, and, in consequence, injurious treatment instituted. It is seldom that a mistake would be made, if the practitioner would take the

trouble, in cases where doubt is possible, to instil a drop or two of solution of *atropiæ sulph.* (gr. iv to the ounce) into the eye. If iritis is present there is scarcely a possibility that the pupil will not dilate irregularly, which is, perhaps, the most important symptom in diagnosticating iritis.

I do not wish to dwell on the treatment of iritis, but will simply add that the free local use of atropiæ sulph. is of chief importance. The patient should be kept at rest, free from exposure to light. Pain may be relieved by subcutaneous injections of morphine. There is reason to believe that mild but continued doses of calomel serve, in a great degree, to shorten the course of the disease, although it is far inferior in value to atropine.

Treatment of Uterine Tetanus.

Dr. Alexander Milne, of Edinburg, after referring to the extreme difficulty of performing podalic version, where the liquor amnii is absent, or has long escaped, where the parts have become swollen and dry, and the uterus has contracted firmly around the fœtus, describes, in the *Lancet*, the means which he has found most beneficial in enabling version to be effected. In the first place, he considers chloroform should be administered, and very freely too; in many instances it relaxes the spasm in a wonderful manner, but he has seen it fail frequently in uterine tetanus. In the next place, when chloroform is ineffectual, recourse should be had to tartarized antimony and lobelia inflata. A grain of the former may be given, and twenty-five minims of the tincture of lobelia inflata; after the lapse of twenty minutes the patient should be placed under the influence of chloroform. The triad form a potent antispasmodic whose conjoint action is almost irresistible, and the spasm is overcome. The uterus being relaxed, the hand finds entrance, and version becomes a possible thing. In regard to the hand to be employed, which he considers to be a matter of capital importance, he holds that the left, in the great majority of cases, is the proper one to employ. It is the best in all dorso-anterior cases, and better success is attained with it than with the right, even in dorso-posterior ones, where there is fluid and space. Lastly, in reference to the point whether one leg or both should be seized, Dr. Milne observes that "in difficult cases, to speak paradoxically, we can neither afford to seize both nor to want both; that is to say, there is little room to enable us to get hold of both, but it is better to have both if at all practicable. The fœtus will then revolve more readily, and come down more speedily." Dr. Milne records a series of cases which support his views.

Ovarian Cyst in a Child Eight Years Old.

Dr. C. G. Goodrich, of Minneapolis, reports the following case in the *Minnesota State Society Transactions*:—

My attention was called to —— ——, aged eight years, during her convalescence from typhoid fever, her parents having observed that the tympanitic distention of her abdomen did not disappear as in other members of the family who had also been ill with fever.

Without making a careful examination, I attributed it to excess in eating, and deficient exercise; prescribed a laxative, and heard no more of the case for three days, when on making a more thorough examination, I came to the conclusion that my patient had an ovarian tumor.

She was seen by Drs. Ames, Hill, Lindley, and Kimball, who could not fully agree with my diagnosis, on account of the impossibility of so young a girl being the subject of ovarian disease.

The youngest recorded case of ovarian cyst is one mentioned in the *British Review*, in the person of a child aged 11 years.

Her abdomen continued to enlarge; I introduced a trocar (having previously made an exploratory puncture), and drew off eight pints of thick, yellow, glutinous fluid, much to her relief, and which was followed by rapid and encouraging improvement.

On the sixth day, however, the abdomen had commenced to enlarge, and on the fourteenth day from the first puncture I was obliged to relieve her by tapping, followed by a third operation seventeen days from the second, removing a much larger amount of fluid than on previous occasions.

From this time she failed rapidly, the most efficient remedies employed to cause absorption, and every effort to maintain her strength, being of no avail.

The autopsy revealed an ovarian cyst, with extensive adhesions to the peritoneum and liver.

Reviews and Book Notices.

NOTES ON BOOKS.

——Appleton's handsome work, "*Picturesque America*," is finding a large sale. The agent for Philadelphia is Mr. William Tweddle, 725 Sansom street, formerly Lieutenant 13th O. V. C. We recommend him to the medical fraternity of this city as an old acquaintance.

——Dr. Bossu has recently brought out a new edition of his excellent treatise on Medical Botany. It is entitled:—

Traité des plantes médicinales indigènes, description, propriétés, usages, récolte, préparations et indications thérapeutiques; précédé d'un Cours élémentaire de botanique, organographie et physiologie végétales, classifications, caractères des familles naturelles, des genres et des espèces; accompagné d'un atlas de 60 pl. en taille-douce, 1100 dessins, plus 92 fig. intercalées dans le texte.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, OCT. 19, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

ON THE COOLING OF HOUSES.

Concerning the warming and ventilation of dwelling houses, public buildings, and hospital wards, there is no lack of literature; but how to keep buildings cool in extremely hot weather, is a new field for the admirer of healthy homes. A very important field it is, too, not in respect of comfort merely, but of health.

This past summer, in spite of the enormous exodus of their population, estimated at fourteen per cent., the mortality returns of New York and Philadelphia were double and triple their ordinary figures in the hottest weeks of July and August. Suffering, disease and death, are vastly augmented in all our northern cities in these months.

Hence we attach no little importance to suggestions looking toward means of reducing the temperature at such times. We have known physicians to recommend the hanging of wet sheets in sick-rooms, and similar devices, to allay the oppressive heat. Far better would it be could some device be put in operation which would lower the temperature at will, promptly, permanently, and without excessive dampness.

We have collected several such suggestions, and though none of them answer our wishes, we give them as stimulants to further inventions.

A writer in the New York *Nation* said:—

I shall try to cool air down to 60° or 65°. I think there will be no difficulty in effecting it in the following manner:

I mean to lead a considerable number of small air-pipes several times through a very large box or bin, which is to be packed full of some light substance, moss, for instance, through which air could easily find its way. Water from above will be suffered to drip all over the top of this moss, and will trickle through it to the bottom of the bin. Through the moss, from the bottom upward, I shall force a current of air, and thus produce rapid evaporation. And this will cool the air-pipes, and they will cool the air which passes through them. To force a current through these pipes, and to force another one through the moss, I shall use a very large, but light pair of bellows; and the bellows will be worked by a sort of clock arrangement, in which the immediate motive power will be a heavy weight. I calculate that a horse will, with ten or fifteen minutes' heavy pull (once a day or once a week, according to the heat of the weather), wind this clock affair. It shall have a pendulum, and be started or stopped at pleasure, and by altering the length of the pendulum, will run fast or slow according to the heat. The cold air which the air-pipes furnish will be led through cheap wooden pipes to the various rooms of the house, always near the ceiling, and be turned on or off like the hot air of ordinary furnaces. My doors and windows will be kept closed in the hottest weather, as carefully as in the coldest. I shall have no flies, nor mosquitoes, nor dust. My blinds will be open and my rooms light. The air will be as dry as that outside, and the temperature of it will be between 60° and 70°, according to my belief as to what degree may be the healthiest. I have not carefully estimated the expense of this machine, but I am sure it will not cost much, and am equally sure that the extra work it will enable me to do in the hottest weather will soon repay me for the outlay.

Several correspondents of the *Scientific American* have come forward with plans not dissimilar in principle. One says:—

At the time of erection (or afterwards),

tunnel or excavate from the basement, 4 feet below the surface, any distance practicable from the dwelling; brick this tunnel, or lay an iron tube of proper size, and connect it with an air chimney (the higher this chimney, the purer the air, and the greater the distance from the building, the greater the modification of the heat); connect a small tube, leading to each room, to this air passage at the basement, and direct as may be desired for heating purposes. This simple plan will not require any rotary blower or the extra expense of an engine, if the flues and passage ways are arranged properly in the building, and with a greater elevation than the top of the air chimney. The air passing under ground in this manner will be pure and cool in summer, and the cold will be modified in winter; and the method will save a great per cent. of fuel during the months of the latter.

It is doubtful if this latter would answer. Some artificial means of cooling the air should be devised; some plan, cheap, simple, and easily applied, without the cost of lofty chimneys, engines, etc.

The study of the subject must begin with a consideration of the various methods at our disposal for the artificial reduction of temperature. Rapid evaporation is the most potent of these. It is also very manageable. The ice making machines extensively used in many northern cities employ it. Very light products of mineral oils are often chosen for the purpose. Mr. Hughes' patent for producing artificial cold, granted last year in England, may serve as a general example of these machines.

In this invention the general means of producing the cold is by the evaporation by mechanical means of volatile liquids. Two classes of liquids are employed under different modifications of the apparatus: one, those volatile liquids which are either insoluble or but sparingly so in water, the other, those that are very largely soluble. For insoluble liquids the apparatus is so arranged that the volatile shall cool a liquid by its evaporation in contact with it, either while running down thin sheets or one liquid rising in bubbles through the other, and the vapor recondensed in like manner in immediate contact with cold water. For the other class, of which ammonia is taken as a type, the liquid is evaporated in the ordinary way, but condensed by being thrown into aqua ammoniæ kept at ordinary temperature by cooling pipes, and this aqua ammoniæ is cooled for a refrigerating liquid by being injected into a second pump, which liberates much of the gas from the solution, and afterwards throws out the cold solution for freezing purposes, and the ammoniacal gas to be recondensed in the above aqua ammoniæ kept at such ordinary temperature.

A modification of such machines, adapted to the purpose we have in view, would be easy.

The flues and pipes used for conveying and radiating heat in winter should be adapted to conducting cold air in summer. The cold air itself should not be driven into the room, but a cold surface (in the plan of steam heating pipes) should be exposed in a room or ward, sufficient in size to modify the temperature as desired.

What a grateful relief this will prove (for we have no doubt it will be put in practice ere long), those who have tossed on a sleepless and feverish couch in our midsummer heats, will appreciate. It will ultimately be adopted in all first-class hospitals, as an essential to the comfort and convalescence of the patients.

ADDITIONAL NOTES ON THE ADVANCE OF THE CHOLERA.

The peculiarities to which, in a recent editorial, we called attention, as exhibited in the present epidemic, namely, that while the disease in single cases is as malignant as ever it was, yet it travels far more slowly, and spreads in a given locality much less rapidly, are illustrated also by its history in Arabia during the past season.

We traced it in its march westward through Europe, in our last article; we

shall now sketch its progress along its other line of approach, Mecca and the Red Sea. At the close of last February the religious ceremonies at Mecca had brought together 110,000 pilgrims at that city. Not a single case of cholera was reported among them. The ceremonies being over, they commenced to return home. Suddenly, on the last day of the month, a number of cases of cholera broke out in the caravans that were leaving the city, among the mendicant orders.

Word was at once sent to quarantine the vessels which had already started, at El Wedj, where a sanitary station had been erected under the care of Dr. DA COROGNA, a graduate of the Ecole de Medicine of Paris.

Meanwhile, on the route from Mecca to Medina, the epidemic raged with violence. About 25,000 pilgrims passed over this route, of whom at least 4000 succumbed to the disease between the 1st and 29th of March. Of 16,000 pilgrims who had passed through Egypt on their way to the ceremonies at Mecca only 11,687 returned, showing a mortality of 4.313, or about 25 per cent. of the total number. In spite of this terrible fatality, the disease did not show the same tendency to expansion which had been observed in all previous epidemics.

Neither Mecca nor Medina suffered severely, the deaths from cholera in the former amounting to but fifteen a day in March. Not a single case of cholera appeared among the 9000 or 10,000 pilgrims, after their quarantine at El Wedj. This quarantine varied from fifteen to twenty days, and no doubt was very effective in preventing the germs of the disease from being carried to Cairo, Alexandria, and Europe.

On the whole, a careful survey of the field this fall shows that there is less reason than a year ago to fear an extension of the epidemic over Western Europe and America; the line between Asia and Africa and Europe is better guarded by sanitary establishments; the disease itself, though as fatal in individual cases as in the most virulent epidemics of former years, spreads more slowly; and although treatment is as useless as ever, and although the disease seems almost naturalized in Europe (at Kiew and vicinity), we need feel little alarm about any further disasters from the present extension of its voyages.

NOTES AND COMMENTS.

Training the Nervous System.

Dr. J. M. WINN calls attention, in the pages of an English contemporary, to the truth that the exercise and diet compatible with the best intellectual vigor differs from that adapted to the utmost muscular strength. He remarks:

If we keep in view the difference between the structure of the nervous and muscular tissues, it becomes evident that a somewhat different kind of diet is required for the nutrition of the former from that of the latter. In order to develop and support the muscular organization, a large proportion of animal food is requisite; not so, when the object is to supply the waste of the more delicate and subtle tissue of the nervous system. Fatty matter and phosphorus enter largely into the composition of the brain. It has been estimated that the former (brain-wax, or brain-fat, as it has been called) amounts to about one-third, and the latter (phosphorus) to one-twentieth or one-thirtieth of its solid substance. It is now generally believed that exertion of the will and reasoning powers cause an expenditure of the brain-material, and a corresponding exhaustion of the nervous force. However, it must not be forgotten that prolonged bodily exercise exhausts the nervous force, as muscular contractions are commonly brought into action by nervous influence; hence the importance of a student's avoiding excessive bodily efforts, which expend that nervous energy so essential for brain-work.

He should take gentle exercise for at least two hours daily in the open air, and his diet should be light, simple, and nutritious. Large quantities of animal food and malt liquor conduce rather to somnolency than to mental activity. There is a common say-

ing that "fish feeds the brain," which may depend on the phosphorus it contains; certainly there can be no doubt that some sorts of fish, such as soles, whiting, plaice, etc., are peculiarly suitable to a weak digestion. I may incidentally observe that I have found a fish diet especially serviceable for those predisposed to phthisis. A certain amount of rest and sleep, as well as a due supply of healthy blood, are absolutely necessary to maintain the brain in a working condition. Above all, the amount of mental work must be in proportion to the physical strength. I knew an instance of a gentleman who attempted to read ten hours a day, and whilst doing so his competitors got ahead of him; he then wisely reduced his time of work to eight hours. He then recovered his lost ground, and came out a wrangler. There are men of iron constitution who can afford to laugh at these precautions, and who can excel both in mental and bodily exercises. A friend of mine who went in for a public examination surpassed most of his contemporaries, who were his equals in mental capacity, by sheer power of physical endurance.

The Limits of Inhabitation.

An English physician, Dr. R. A. SMITH, long engaged in sanitary studies, has recently written as follows:—

"I know that the lowest classes, living in poisoned houses, die from other causes than bad air; but I am speaking of air at present, and that is one of the causes. The time must come—and the sooner the better—when it shall be enacted that no land shall contain more people per acre than we know by experience in several places can live healthily thereon. The same thing must be said regarding houses, although these are more difficult for governments to deal with, because of the degradation of some of the population. Still the limitation must be obtained, and for that we must strive."

On this passage, and some recommendations to destroy the houses in overcrowded localities, *The Nation* remarks:—

"We wish no man could be made a member of our common councils until he had passed a competitive examination on the passage following, and had beaten all his opponents in the zeal, at least, with which he declared his willingness to act according to his knowledge."

With every wish for the early improvement of common councilors and all other functionaries, we seriously doubt whether any limit can or ought to be assigned to the number of people who should live on a given area. We are inclined to believe that it is practically unlimited, if only sanitary rules be strictly enforced. The mere aggregation of human beings entails no disastrous consequences of necessity; but it is the neglect of hygienic precautions so apt to follow that leads such writers as Dr. SMITH astray. Were it necessary, abundant evidence could be advanced to show this, but it is too nearly self-evident.

The Frozen Well at Brandon, Vermont.

Several years since, in company with several professional gentlemen, we visited the remarkable well at Brandon, Vermont, a description of which we give below, copied from the *Scientific American*. This well does not seem to have received the attention at the hands of scientific men that it deserves.

"About a mile southeast of the village of Brandon, Vermont, there is situated a well 41 feet deep, the water of which has the remarkable peculiarity of remaining frozen all the year round. In 1859 the owner of the property began the usual excavations for water. After passing through 4 feet of clay and 10 feet of soil, a bed of frozen gravel, 16 feet in thickness, was encountered, which rapidly changed to mud when exposed to heat. Further digging penetrated another bed of clay, and finally a layer of clean gravel, in which water was found. As the winter months approached, ice began to form in the well at the rate of from 2 to 4 inches over night, while during the succeeding summer, though the well remained open, an occasional skim of ice would appear on the surface.

"Eventually the well was abandoned, but since it has remained unused, it is found that if the winter ice is not removed when the weather is quite warm, the water remains frozen through the hottest months. During April last ice 20 inches in thickness was taken out, but as the atmosphere at that time was chilly freezing again took place. On July 16 of this year the temperature in the shade was 85°; at two feet from the surface of the ice in the well the mercury sank to 32°.

"In 1860 four shafts were sunk in immediate proximity to the well without striking frozen ground; a fifth endeavor was

more successful, but the experiment was never completed, though we learn that it will be once more undertaken next summer. There is considerable speculation in scientific circles as to why this particular locality, possibly 200 feet square, should permit the winter cold to descend through from 12 to 29 feet of clay and gravel and freeze a mass of material averaging 14 feet thick, and yet not affect any other spot composed of similar strata. Professor Hager is of opinion that the phenomenon is due to glacial remains. The beds of clay, which intercept the sun's heat, and besides shed off surface water, together with the favorable arrangement of the strata in connection with its dip and the proximity of the outcropping limestone, it is believed, have protected the frozen mass from thawing for thousands of years, while the remainder of the glacier has long since melted away, leaving only its moraines in the neighborhood. Mr. Clarence Sterling, of Bridgeport, Conn., who has already spent some time in the investigation of the subject, proposes next year to carry down the fifth well to a greater distance."

The University Hospital.

Professor AGNEW, while in Europe, spent much of his time in visiting the various Hospitals in Vienna, London, and Paris, and has brought with him many valuable hints in relation to their construction and management, which will be of service in the establishment of the new University Hospital.

It is now confidently hoped that the generosity of the friends of this much-needed Institution will soon place the treasury in such condition that the work may be vigorously pressed to completion.

The value of this Hospital will be inestimable to the University, and every friend should feel interested in rendering it assistance.

The Presbyterian Hospital, New York.

On the 10th inst. the Presbyterian Hospital, located on Seventieth street, between Madison and Fourth avenues, New York, was opened with the customary ceremonies. The portions yet to be erected are wings, to be built on the Madison avenue and Fourth avenue sides. The materials used in the erection were Philadelphia brick and Lockport limestone. The building extends 200 feet from north to south, and 400 feet from east to west. When fully completed it will consist of three pavilions, and accommodate 300 patients.

The site of the building, which was valued at $250,000, was donated by Mr. Lennox, who also contributed $10,000. So far the building has cost $750,000, and it is expected to cost $1,000,000 when the wings are added.

A full description of this Hospital, with two full-page plates, was given in the REPORTER of March 4th, 1871.

Prize for an Essay on Galvanism.

The Academy of Sciences in Bologna has announced that a prize of 1200 *lire* ($240), the "Aldini Prize," will be awarded to the author of the best scientific experimental essay on galvanism or dynamic electricity. Essays intended for the competition must be sent in between July 1, 1872, and June 30, 1874, and must be written in Italian, Latin, or French. They must be either written or printed; but in the latter case, must not have been published previously to the two years above mentioned. Each essay is to bear a motto, and to be accompanied with an envelope stating the name of the author. They must be addressed to the Perpetual Secretary of the Academy of Sciences of the Bologna Institution.

The Action of the Cerebral Hemispheres.

At the late meeting of the French Association for the Advancement of Science, Dr. FLEURY compared the dynamism of the two cerebral hemispheres. Serre and Broca have for a long time pointed out the functional inequality of the two cerebral hemispheres, and a great number of clinical facts confirm their ideas. Gratiolet has observed the same inequality in the development of the brain in the fœtus. The left hemisphere excels the right. Dr. Fleury explains this functional inequality by the unequal distribution of blood in the cerebral hemispheres. Relying on the physical laws which regulate the course of the blood in the veins, and on the results of numerous measurements, he shows that the left hemisphere receives a more considerable quantity of blood than that which reaches the right hemisphere. The measurements taken of the jugular veins also confirm this opinion. Finally, we have to mention the agreement of a greater afflux of blood to the right superior limb.

The Chemist's Lament.

Our learned friend, Prof. John ORDRONAUX, has a poem with the above title in the *College Courant*. We have a mind to make a selection from it, and therefore give the

MORAL.

Oh how can we ever grow usefully wise,
Till we read Nature's laws through chemistry's eyes?
How show why all people for want of breath, die,
And turn, when inhumed, into onions or rye?
How else can we tell how a musical frog,
Is duly evolved from a dull pollywog;
Or unified lovers revealing one soul,
Two hemispheres joined by an opposite pole,
Which, being reversed, breaks the chemical force
Of conjugal union, by legal divorce?
How else can we show how our crimes spring from bile
Perverted, and blunting our conscience the while:
Or, if the child fathers the man anyhow,
Why, *ex hypothesi*, the calf must the cow?
These riddles our chemistry solves for all men,
By ringing the changes on H O C N.

Dr. JOHN ORDRONAUX, we may add, is Professor of Medical Jurisprudence in the new school of law in Boston University. He graduated at Dartmouth College in 1850, at Harvard Law School in 1852, and received a medical diploma from Columbia University, Washington, D. C., in 1860.

What is Dirt.

Old Dr. Cooper, of South Carolina, used to say to his students: "Don't be afraid of dirt, young gentlemen. What is dirt? Why, nothing at all offensive, when chemically viewed. Rub a little alkali upon the dirty grease spot on your coat, and it undergoes a chemical change and becomes soap: now rub it with a little water and it disappears. It is neither grease, soap, water, nor dirt. That is not a very odorous pile of dirt you see yonder; well, scatter a little gypsum over it and it is no longer dirty. Everything like dirt is worthy our notice as students of chemistry. Analyze it; it will separate into very clean elements. Dirt makes corn, corn makes bread and meat, and that makes a very sweet young lady, that I saw one of you kissing last night. So after all, you were kissing dirt, particularly if she whitened her face with chalk or fuller's earth; though I may say that rubbing such stuff upon the beautiful skin of a young lady is a dirty practice. Pearl powder I think is made of bismuth, nothing but dirt. Lord Palmerston's fine definition of dirt is 'matter in the wrong place.' Put it in the right place and we cease to think of it as dirt.

The Rattle of the Rattlesnake.

At a meeting of the Essex Institute Mr. F. W. PUTNAM gave a description of the structure of the horny appendage to the tail of many snakes, especially developed in the genus of Rattlesnakes, and controverted the idea of natural selection having anything to do with its peculiar development. He also thought that the supposition that the rattle was a benefit to the snake, as a means of enticing birds, by its sound imitating that made by the Cicada, as suggested by a writer in a late number of the *American Naturalist*, could not be accepted. The Cicada was not a ground insect, and was comparatively rare, even among the trees, in such localities as were most frequented by the rattlesnake. Secondly, the sound made by the snake was very slight under ordinary circumstances, and the rattle was not sounded to any extent unless the snake was disturbed by some cause. His own observations on these snakes, in their natural habitat, led him to believe that it was not at all their nature to set up a rattling for the sake of enticing birds to them, but that they would slowly and cautiously approach their victim, or else lie in wait ready to give the fatal spring upon anything that came near. He believed that the rattle was in reality a detriment to the snake, except in so far as it served to call the sexes together, which, from the unsocial habits of the species, he thought was most likely its true function.

The Origin of Cancer Cells.

On this debatable topic Dr. KNOLL remarks, in *Virchow's Archiv*, that it is well known that the cells of cancers, and more especially of the epithelioma, present the character of epithelial cells; and it has been of late a matter of considerable discussion whether, as Virchow long ago asserted, these epithelial cells may originate from connective tissue corpuscles, or whether, as many now hold, they only originate from some form of epithelium, glandular or other. In the present paper a case is detailed with a view to contributing to the solution of this question. The tumor was an epithelioma of the vocal cords, and from its examination the author concludes that here, at least, the epithelial cells of the cancer took origin in the gland-cells of the mucous glands, and only the stroma in the connective tissue of the glands. He is

not, however, inclined from this case to draw a general conclusion, and differs from such observers as Waldeyer, in admitting that the epithelial cells of cancer may arise in connective tissue, though probably they generally take origin in epithelial structures.

Analysis of the Empire Spring, Saratoga.

This celebrated spring has recently been subjected to a careful analysis, with the following results:

One United States gallon, of 231 cubic inches, contains:

Chloride of Sodium	506.630 grains,
Chloride of Potassium	4.292 "
Bicarbonate of Magnesia	42.953 "
Bicarbonate of Lime	109.656 "
Bicarbonate of Lithia	2.080 "
Bicarbonate of Soda	9.022 "
Bicarbonate of Baryta	0.070 "
Bicarbonate of Strontia	a trace.
Bicarbonate of Iron	0.793 "
Bromide of Sodium	0.266 "
Iodide of Sodium	0.006 "
Sulphate of Potassa	2.769 "
Phosphate of Soda	0.023 "
Silica	1.458 "
Alumina	0.418 "
Fluoride of Calcium, Biborate of Soda, Organic matter,	each a trace.
Total	680.436 grains.
Carbonic Acid Gas	344.669 cub. in.

Deaths from Chloroform.

The repeated accidents from the use of this anæsthetic are causing comment in even non-medical periodicals. The *Church Journal* remarks:—

It is true that the medical profession, after twenty or more years' use of a well-known drug, have no settled convictions in regard to the cause or prevention of these *accidents*, as they are called, no reliable guide for its administration, no intelligible theory of its poisonous action, and consequently no accepted theory of cure when danger comes.

Everybody knows the simple, deadly fact that, mysteriously, "chloroform may kill." Physicians know nothing more.

The fatal termination is regarded as providential, and at coroner's inquests the physician usually testifies that he politely remonstrated and advised against its use, thus adding a suicidal coloring.

The attempt to connect these cases with organic disease has failed in every instance. The unfortunates are exceptionally healthy, and yet physicians testify absurdly, "I do not administer in heart disease."

We call on the medical profession for an intelligible explanation of this phenomenon, for a valid rule which shall contra-indicate its use or permit it with safety.

We acknowledge the force of these remarks, and appreciate the extraordinary difficulty that surrounds the investigation. The more need for an early and thorough study of it.

Another Theory of Creation.

Theories of the origin of species are abundant just now. The latest is by Mr. B. G. FERRIS. He explains it thus:—

"My theory, in short, is, that at each step in the creation of species a prior living organism is used by the Creator as an ovum or matrix to produce a new species, without the aid of the ordinary *paternity* required in reproduction; and precisely in the same way, that the lowest animal was produced by creative influx into a matrix of crude earthy materials. Reproduction requires the coöperation of the animal sexes, while original creation does not."

This theory has the endorsement of the Boston Society of Natural History. To us it seems foolishness; and the arguments used by the author to support it are certainly untenable. He adopts, for instance, the obsolete view that "all beings are at one stage of embryotic progress female." This is totally erroneous.

The Union of Morphia and Chloroform.

A good deal has been written about the union of morphia-injections with chloroform-inhalations to produce prolonged insensibility to pain after important surgical operations. M. Demarquay concludes, from a short series of experiments, that it is a method liable to especial dangers, arising from lowering of the temperature.

On the other hand MM. Sabbé and Guyon have experimented on the effects of this mixture in surgical, or such operations as require the patient to be placed in an anæsthetic state, and express a belief that the effects of the mixture on the patient last longer and may be maintained by small doses of chloroform with less danger to the patient. The discovery of this effect is due to M. Claude Bernard.

The Influence of Laws of Succession on the Fertility of Marriage.

The French laws force a testator to divide a large part of his property equally among his legitimate children. Hence, says M. JANNET, a writer whose work is reviewed in *The Nation*, a large family is the dread penalty of the small husbandman, and hence comes that *sterilite systematique* constantly alluded to in this work. Physicians (for example, BERGERET,) have borne concurrent testimony with M. JANNET'S as to the direct connection between the laws of succession and the deliberate suppression of offspring, and consequent stationariness of the French population. Among those who protest most energetically against this feature of the civil code are the newly annexed Savoyards, accustomed to testamentary liberty, and who see their brethren across the Alps under a law (Italian Civil Code of 1866) which leaves one-half of a man's property at his absolute disposal, whatever the number of his children. Such was the liberty also of the people of Nice, who, under the old Sardinian constitution, could boast of a law, repealed only in 1848, which exempted all Sardinian subjects having twelve legitimate children from all public taxes and burdens, even to customs duties on goods and provisions necessary to the support of their families, during their entire lives. In all the departments under M. JANNET'S consideration, population is shown to be either stationary or retrograde; and as the *partage force* is carried to the greatest extent, for obvious reasons, in the most fertile districts, so systematic sterility and its attendant vices there flourish most.

Physicians will strive in vain against elected infertility in marriage, so long as laws of this kind are in vogue.

Indications for Counter-Irritation.

Dr. A. H. SMITH expresses his opinion, in the *New York Medical Journal*, that there are four conditions in which counter-irritation may act to relieve pain or abate inflammation:

1. When there is a direct vascular connection between the irritated surface and the diseased part. In this case, counter-irritation acts by opening a larger passage for the blood through the sound tissue, and thus diverting the circulation in part from that which is diseased. An example of this is afforded by the application of blisters to the neighborhood of inflamed joints.

2. When a large surface is exposed to the irritating agent, in which case the entire circulation of the body, including that of the diseased part, may be modified. An example of this may be found in the use of hot foot-baths, to relieve congestions of the thoracic or abdominal organs, or of hot applications to the chest and abdomen to relieve wakefulness.

3. When the irritation is transferred to a distance by reflex action, and there simulates the first condition. As an example of this, may be cited the employment of blisters to the breast, to act upon the lungs, there being no direct communication between the vessels of the skin and those of the diseased organs.

4. When pain is the result of a mechanical cause, which cause may be removed by exciting muscular action through the reflex function; as when, in flatulent colic, the muscular coat of the intestines is brought into action by irritation applied to the abdomen, and expulsion of the flatus results. Of course two or more of these conditions may co-exist, and probably in most cases such is actually the fact, and the result is thus rendered more or less complex.

Influence of the Colored Rays of Light on Respiration.

A singular observation has been made by Drs. SELMI and PIACENTINI. Placing animals under glasses of various colors, and examining the expired air by analytical methods, they discovered that, as in plants, so in animals, the colored rays of light perceptibly affect the separation of carbonic acid. Letting 100 represent the amount of this gas exhaled by a dog under colorless glass in a given time, under black glass the amount was reduced to 82, under violet to 88, under red to 92, under blue increased to 104, under green to 106, and under yellow to 127! A dove and a hen subjected to the same conditions showed still greater differences. These results are quite analogous with those observed in plants. Under green and yellow glasses they take up the largest quantities of carbonic acid, while animals subjected to the same conditions give off the same gas most rapidly. The experiments were carefully conducted, and may be found in the *Rendi conti del reale instituto Lombardo*, vol. 3, 1872.

Effect of Color on Health.

A correspondent of *The Builder* states that he had occasion to examine rooms occupied by young ladies for manufacturing purposes, and he has observed that while the workers in one room would be very cheerful and healthy, the occupants of a similar room, who were employed on the same kind of business, were all inclined to be melancholy, and complained of a pain in the forehead and eyes, and were often ill and unable to work. The only difference he could discover in the rooms was that the one occupied by the healthy workers was wholly whitewashed, and that occupied by the melancholy workers was colored with yellow ochre. As soon as the difference struck him he had the yellow ochre washed off the walls and then whitened. At once an improvement took place in the health and spirits of the occupants.

Carbolic Acid in Pruritus.

In prurigo and pruritus, says Dr. PINTSCHOVIUS, in the *Allgemeine Medicinische Central Zeitung*, I have successfully tried carbolic acid externally. I prescribe a solution containing 2½ per cent. of carbolic acid, and of this direct a tablespoonful to be mixed with a teacupful of rain-water. Every morning and evening the diseased skin is thoroughly sponged with this. I treated 30 patients in this way, and every one has recovered in from three to eight days' time.

News and Miscellany.

Hopkins' Hospital.

The old buildings of the Maryland Hospital, Baltimore, Md., are to be torn down shortly, to give place to a more imposing structure under the munificent endowment of Johns Hopkins, Esq., amounting to $2,000,000, to be known as the "Hopkins' Hospital," for the benefit of people of color.

Vital Statistics of Berlin.

Last year there died in Berlin 32,362 persons. Of these there were 188 suicides, 5 murders, 288 accidents, 49 of cholera, 5085 of small-pox, 12 of syphilis, 18 of delirium tremens, 1 of sunstroke, 1 of glanders, 1 of hydrophobia, 3 of trichinosis, and 102 in consequence of surgical operations (hemorrhage, pyemia, etc.) The average annual mortality is about 1 in 38. The annual births 1 in 27. About 3 children average to each marriage, and about 16 children in every 100 born are illegitimate.

The Empress Carlotta.

The *Lancet* remarks: "According to a letter (seemingly well-inspired) in the *XIX Siècle*, the Empress Carlotta maintains her physical health, not only unimpaired, but to some extent improved, while her mental derangement has reached the last stage of imbecility. She lives estranged from all her family, resolutely declining to see either the King or Queen, who are forced to content themselves with catching a glimpse of her during her occasional walks in the grounds of the Château Tervuerer. Her physicians have abandoned all hope of her restoration to sanity, while they augur favorably of her general health. Her mind still dotes on her lost empire, and all her caprices, and they are many, run in the direction of imperial state pageant. She constantly despatches telegrams to Napoleon III; who, she believes, still reigns; and, saddest of all, the name of Maximilian is seldom off her lips."

Francis Lieber.

Doctor Francis Lieber, the distinguished German author and publicist, died suddenly in New York on the 2d of October. He was born in Berlin, in the year 1800, and at an early age entered the Prussian army, taking part in the campaigns that culminated in the fall of Napoleon I. In 1827 he took up his residence in this country, living first at Boston. In 1835, he was appointed Professer of History and Political Economy in the South Carolina College, at Columbia, which position he held until he accepted, in 1858, a similar professorship in Columbia College, New York. Professor Lieber, though advanced in years, was at the time of his death a powerful and eloquent writer, his latest works being striking essays on the subject of prison management and punishment.

Too Much Medicine.

The New Bedford (Mass.) *Mercury* says the medicine-chest of one of the abandoned Arctic whalers was broken open by some of the natives, who, thinking they had found a prize, proceeded to swallow the contents of all the bottles. The survivors described the result as startling, for the doses were too large for the constitution of even an Esquimaux. Several of the partakers died, and others wanted to, but couldn't.

Scientific Garroters.

Dr. F. Kirkpatrick, Vice President of the Royal College of Surgeons, Ireland, while proceeding to visit a patient at ten o'clock at night, recently, was garroted in one of the most fashionable streets in Dublin, and deprived of his watch and chain. One of a gang of three men quickly rendered Dr. Kirkpatrick insensible by pressing firmly on the carotid arteries on both sides.

German Hospital, Philadelphia.

The buildings at Twentieth and Norris streets, in this city, belonging to the German Hospital, having been found to be unfit for the purposes for which they are used, it became necessary to secure other accommodations. A committee was appointed to procure a site, and the large mansion and piece of ground at the southwest corner of Girard and Corinthian Avenues, opposite the gate of Girard College, was purchased. The price paid was $35,000. The new premises were occupied on the first inst. The building will be immediately fitted up for the reception of the patients from the old building before the winter weather sets in.

Poisoned by a Spider's Bite.

One of those unusual cases, death from a spider's bite, is reported from Chelsea, Mass. A livery man, while riding with his wife recently, wearing a coat which had been hanging in his stable, remarked that he had been bitten by something, and on reaching home the author of the mischief was discovered in a poison-fanged spider which had crept into his coat. The wound commenced to swell in spite of medical aid, and resulted fatally.

THERE are at this time four chemical laboratories in Japan where the science is taught, three of them being presided over by Germans, and the fourth by an American. The chief one is at Osaka, where there are nearly 100 students. The rest are at Kaga, Schidzoouka and Fukuwi. A fifth will soon be open at Jeddo. The students are said to be fairly intelligent. but their minds are at present incumbered with astrology and other kinds of spurious philosophy.

THE Elizabeth, N. J., *Journal* says that a certain undertaker there sent to one of the prominent physicians of that place a lot of death certificates with his card on them, as a complimentary present to the doctor. What the doctor sent to the undertaker as an acknowledgment of the compliment we have not heard.

THE trustees of Franklin College, at New Athens, Ohio, have conferred the degree of LL. D. on Dr. Samuel G. Armor, of the Long Island Medical College Hospital, of Brooklyn.

NOTES AND QUERIES.

Dr. J. G., of Illinois.—The prescription entitled "A New Combination," published in THE REPORTER of September 7th, should read "Pulv. caryophyl," instead of "carophyl." A letter was dropped by mistake.

Dr. W. F. Major, Hamilton, Ohio, has a complete set of BRAITHWAITE'S RETROSPECT, bound in leather, for sale.

MARRIAGES.

BAILEY—BATTELLE.—October 10th, 1872, at Trinity Church, Hoboken, N. J., by Rev. R. W. Howes, Matthew A. Bailey, M.D., and Agnes S., daughter of Charles B. Battelle, of New York City.

BLAKESLEE—DAWSON.—By Rev. John Gilmore, August 31st, at the house of the bride's mother, Andrew, Pa., A. W. Blakeslee, M.D., of Mercer, Pa., and Miss Maggie A. Dawson.

CASKEY—LITTLE.—October 9th, 1872, at the residence of the bride's parents, Brooklyn, N. Y., by Rev. Wm. T. Enyard, Floyd Winslow Caskey, of Middletown, N. Y., and Sarah Eva, oldest daughter of George S. Little, M.D.

DUNNING—BALDERSTON.—In Philadelphia, on the 8th inst., at Green Street M. E. Church, by Dr. C. Cooke, minister, assisted by Mr. Langley, pastor, Thomas S. Dunning, M.D., of Middletown, Del., and Lydia, daughter of S. F. Balderston, of this city.

GRISWOLD—HUGHES.—October 5th, by the Rev. H. M. Walker, Dr. E. M. Griswold, of Houston, Texas, and Miss Martha E. Hughes, of Evening Shade, Hamilton County, Ohio.

HANLY—WAY.—In Philadelphia, October 10th, by the Rev. Thomas A. Jaggar, Mr. Abott Hanly, M.D., and Amanda A., daughter of J. Tunis Way.

KING—FISHER.—October 1st, 1872, at Devon, Bucks County, Pa., by the Rev. Frederick W. Beasley, D.D., Dr. Charles R. King, of Andalusia, Bucks County, Pa., and Nancy W., daughter of the late William W. Fisher, of Philada.

MACAW—MORGAN.—At the residence of the bride's father, by special license, on the 26th ult., by the Rev. H. B. Wilson, assisted by the Rev J. K. Leslie and Rev. James Boyle, James Macaw, Esq., M.D., of Bushmills, and Matilda, second daughter of William Morgan, Esq., of Cookstown, County Tyrone, Ireland.

MARSHALL—WALLACE.—At the residence of R. R. Stevens, Glendale, Ohio, October 1st, by the Rev. Chas. Young, Dr. J. L. Marshall, of Fort Dodge, Iowa, and Miss Luella Wallace.

PORTER—LYON.—At Orange, N. J., October 8th, by Rev. Anthony Schuyler, D.D., Edward E. Porter, M.D., of New York, and Miss Mary F. Lyon, of Utica.

RICHTER-ROBBINS.—At Germantown, Pa., October 2d, at the residence of the bride's father, by Rev. James De W. Perry, Dr. H.W. Richter, of Brooklyn, N. Y., and Lizzie, daughter of Jeremiah Robbins.

TICE—PROUDFIT.—At Sterling Valley, N. Y., October 2d, by Rev. Amos C. Beach, D.D., Rector of Christ Church, Oswego, Lewis Tice, M.D., of New York, and Miss H. Elizabeth Proudfit, daughter of the late Alexander Proudfit, M.D., of Sterling Valley.

TOWNSEND—HOLLINGSWORTH.—In Philadelphia, October 10th, by the Right Rev. Alfred Lee, D.D., Protestant Episcopal Bishop of Delaware, assisted by the Rev. Dr. Benjamin Watson, Ralph Milbourne Townsend, M. D., and Ida, daughter of the late Elijah Hollingsworth, of Wilmington, Del.

DEATHS

JUDGE.—In Cincinnati, on the 5th inst., of congestion of the lungs, Mary Cornelia, wife of Dr. J. F. Judge, and oldest daughter of the late Rev. George Rogers.

KEASBY.—August 4th, at Lake Mohonk, Ulster County, N. Y., Mary P., wife of the late Dr. Keasby, of Salem, N. J.

RICHARDSON.—In Brooklyn, N. Y., October 3d, Susan P., wife of Edward T. Richardson, M.D.

WARE.—At Niagara Falls, N. Y., September 21st, of inflammation of the bowels, Charles S. Ware, M.D., aged 48.